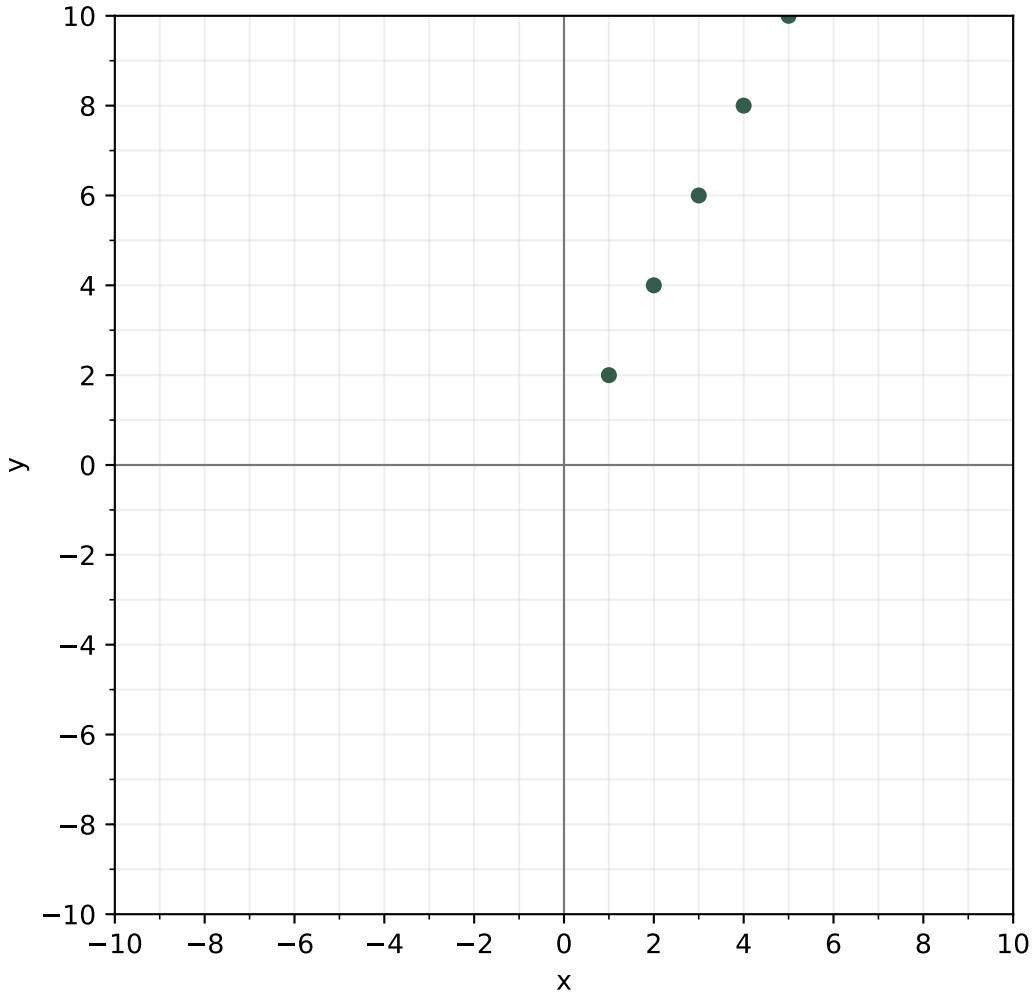
Graphing Arithmetic Sequences

ANSWER / CASE 1

An arithmetic sequence starts at 2, with common difference 2. Find and graph terms 1 to 5. State a formula for term n, n >= 1.

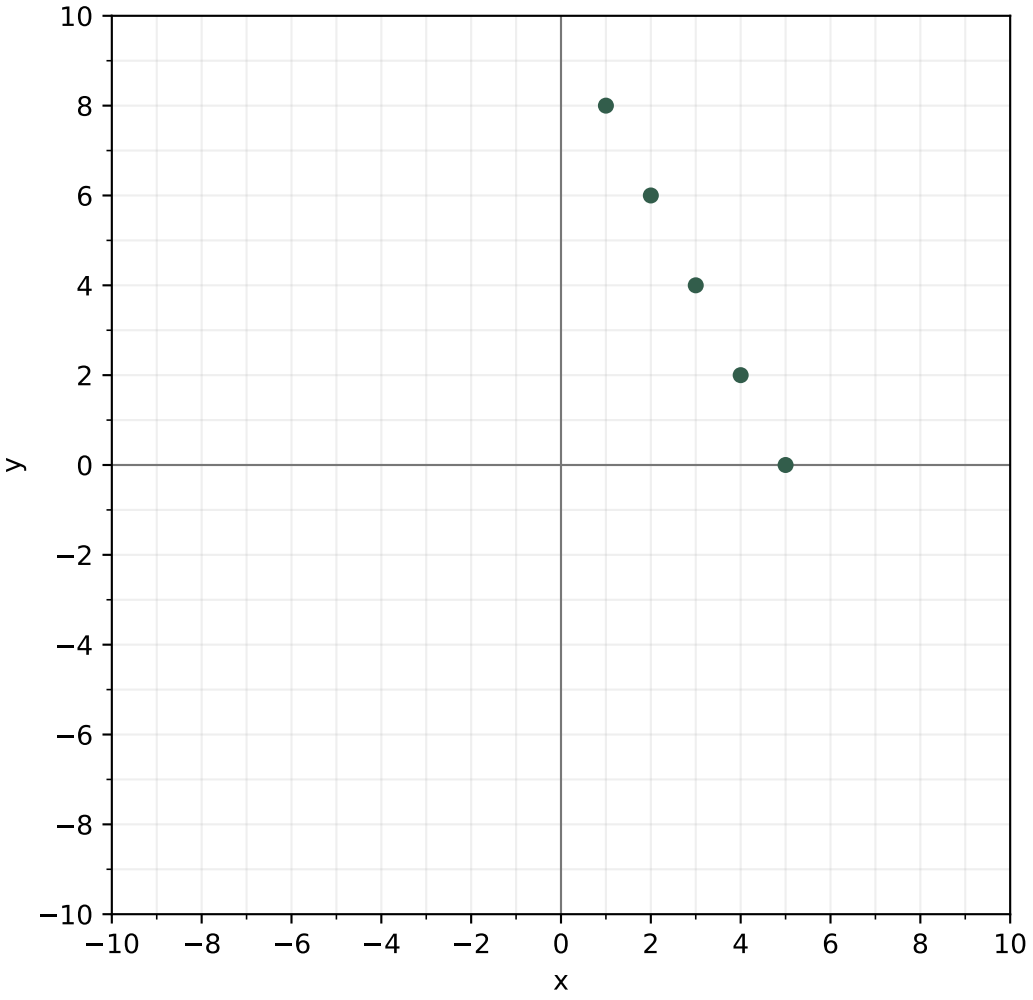


a_n = 2 + (n-1)(2); points: [[1, 2], [2, 4], [3, 6], [4, 8], [5, 10]].
1. The first term is at n=1, not n=0.
2. Add the common difference for each next term. Plot separate points; do not connect them.

Graphing Arithmetic Sequences

ANSWER / CASE 2

An arithmetic sequence starts at 8, with common difference -2. Find and graph terms 1 to 5. State a formula for term n, n >= 1.

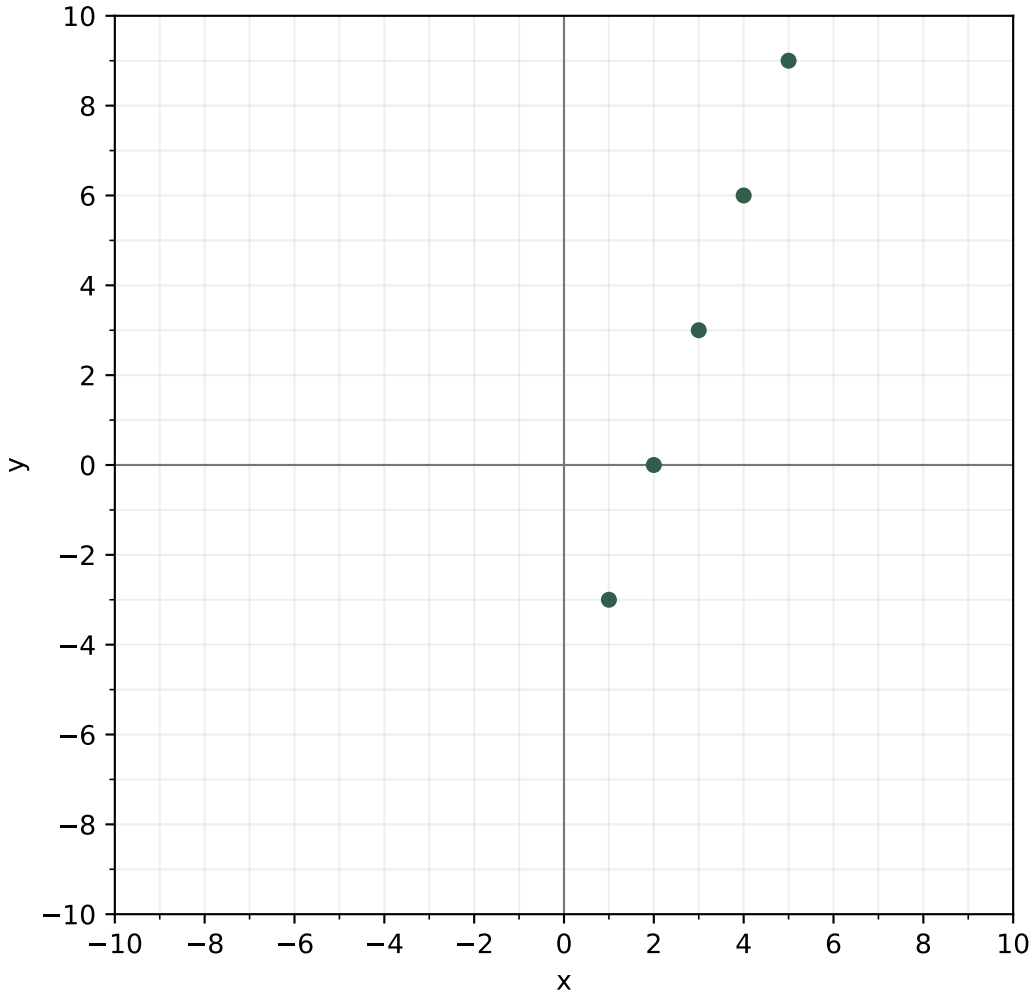


a_n = 8 + (n-1)(-2); points: [[1, 8], [2, 6], [3, 4], [4, 2], [5, 0]].
1. The first term is at n=1, not n=0.
2. Add the common difference for each next term. Plot separate points; do not connect them.

Graphing Arithmetic Sequences

ANSWER / CASE 3

An arithmetic sequence starts at -3, with common difference 3. Find and graph terms 1 to 5. State a formula for term n, n >= 1.

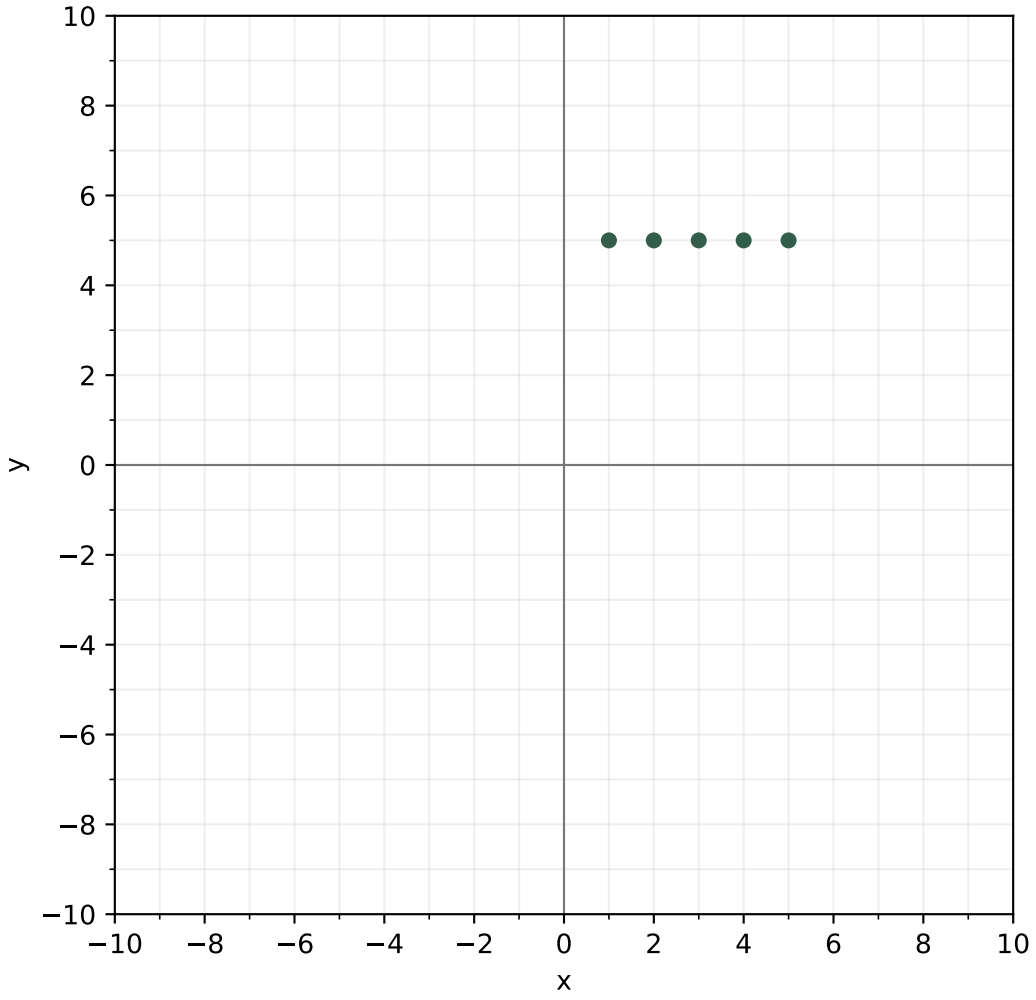


a_n = -3 + (n-1)(3); points: [[1, -3], [2, 0], [3, 3], [4, 6], [5, 9]].
1. The first term is at n=1, not n=0.
2. Add the common difference for each next term. Plot separate points; do not connect them.

Graphing Arithmetic Sequences

ANSWER / CASE 4

An arithmetic sequence starts at 5, with common difference 0. Find and graph terms 1 to 5. State a formula for term n, n >= 1.



a_n = 5 + (n-1)(0); points: [[1, 5], [2, 5], [3, 5], [4, 5], [5, 5]].
1. The first term is at n=1, not n=0.
2. Add the common difference for each next term. Plot separate points; do not connect them.